What is claimed is:

1. A thermal and acoustical insulation product comprising:
rotary glass fibers;
thermoplastic fibers;
textile fibers; and
at least one binder.

2. The thermal and acoustical insulation product of claim 1, wherein said rotary fibers comprise scrap fibers.

3. The thermal and acoustical insulation product of claim 1, wherein said thermoplastic fibers comprise scrap nylon fibers.

4. The thermal and acoustical insulation product of claim 1, wherein said textile fibers comprise scrap fibers.

5. The thermal and acoustical insulation product of claim 1, wherein said thermoplastic fibers are about 6 to 130 mm in length.

6. The thermal and acoustical insulation product of claim 1, wherein said thermoplastic fibers are about 13 to 102 mm in length.

7. The thermal and acoustical insulation product of claim 1, wherein said thermoplastic fibers have a diameter of about 20 to 50 micrometers.

8. The thermal and acoustical insulation product of claim 1, wherein said thermoplastic fibers make up about 30 to 50 wt. % of said insulation product.

9. The thermal and acoustical insulation product of claim 1, wherein said rotary fibers have an average diameter of about 3 to 5 micrometers.

10. The thermal and acoustical insulation product of claim 1, wherein said rotary fibers have an average diameter of about 4 to 5 micrometers.

11. The thermal and acoustical insulation product of claim 1, wherein said rotary fibers have an average fiber length of less than about 100 mm.

12. The thermal and acoustical insulation product of claim 1, wherein said rotary fibers have an average fiber length of less than about 75 mm.

13. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a total glass fiber content of about 30 to 50 wt. %.

14. The thermal and acoustical insulation product of claim 13, wherein said textile fibers make up less than about 20 wt. % of the total glass fiber content of said insulation product.

15. The thermal and acoustical insulation product of claim 1, wherein said textile fibers have an average diameter of about 6 to 20 micrometers.

16. The thermal and acoustical insulation product of claim 1, wherein said textile fibers have an average fiber length of about 13 to 130 mm.

17. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a gram weight in the range of about 530 to 3750 gm/m^2.

18. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a gram weight in the range of about 700 to 3300 gm/m^2.

19. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a density in the range of about 16 to 56 kg/m^3.

20. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a density in the range of about 24 to 48 kg/m^3.

21. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a thickness of about 10 to 200 mm.

22. The thermal and acoustical insulation product of claim 1, wherein said insulation product has a thickness of about 10 to 50 mm.

23. The thermal and acoustical insulation product of claim 1, wherein said binder is a thermosetting resin powdered binder at about 5 to 35 wt. % of said insulation product.

24. The thermal and acoustical insulation product of claim 1, wherein said binder is a thermosetting resin powdered binder at about 10 to 20 wt. % of said insulation product.

25. The thermal and acoustical insulation product of claim 1, wherein said binder is a thermoplastic powdered binder at about 5 to 35 wt. % of said insulation product.

26. The thermal and acoustical insulation product of claim 1, wherein said binder is a thermoplastic powdered binder at about 10 to 20 wt. % of said insulation product.

27. A thermal and acoustical insulation batt comprising:

a fibrous insulation mat having a first side and a second side, said mat comprising:

rotary glass fibers;

thermoplastic fibers;

textile glass fibers; and

at least one binder, wherein a non-woven facing layer is bonded to at least one of said two sides of the fibrous insulation mat.

28. The thermal and acoustical insulation batt of claim 27, wherein said rotary glass fibers comprise scrap fibers.

29. The thermal and acoustical insulation batt of claim 27, wherein said thermoplastic fibers comprise scrap nylon fibers.

30. The thermal and acoustical insulation batt of claim 27, wherein said textile glass fibers comprise scrap fibers.

31. The thermal and acoustical insulation batt of claim 27, wherein said thermoplastic fibers are about 6 to 130 mm in length.

32. The thermal and acoustical insulation batt of claim 27, wherein said thermoplastic fibers are about 13 to 102 mm in length.

33. The thermal and acoustical insulation batt of claim 27, wherein said thermoplastic fibers have an average diameter of about 20 to 50 micrometers.

34. The thermal and acoustical insulation batt of claim 27, wherein said thermoplastic fibers make up about 30 to 50 wt. % of said insulation batt.

35. The thermal and acoustical insulation batt of claim 27, wherein said rotary fibers have an average diameter of about 3 to 5 micrometers.

36. The thermal and acoustical insulation batt of claim 27, wherein said rotary fibers have an average diameter of about 4 to 5 micrometers.

37. The thermal and acoustical insulation batt of claim 27, wherein said rotary fibers have an average fiber length of less than about 100 mm.

38. The thermal and acoustical insulation batt of claim 27, wherein said rotary fibers have an average fiber length of less than about 75 mm.

39. The thermal and acoustical insulation batt of claim 27, wherein said insulation batt has a total glass fiber content of about 30 to 50 wt. %.

40. The thermal and acoustical insulation batt of claim 27, wherein said textile fibers make up less than about 20 wt. % of the total glass fiber content of said insulation batt.

41. The thermal and acoustical insulation batt of claim 27, wherein said textile fibers have an average diameter of about 6 to 20 micrometers.

42. The thermal and acoustical insulation batt of claim 27, wherein said textile fibers have an average fiber length of about 13 to 130 mm.

43. A method of making a thermal and acoustical insulation mat, comprising the steps of:

(a) mixing rotary glass fibers, thermoplastic fibers, textile glass fibers and at least one binder into a fiber/binder mixture;

(b) dividing and blending the fiber/binder mixture into a fiber/binder blend;

(c) forming the fiber/binder blend into a fibrous mat having a first side and a second side; and

(d) curing or heating the fibrous mat into the thermal and acoustical insulation mat.

44. The method of claim 43, further comprising the step of:

applying a non-woven facing layer to at least one of the first and the second sides of the fibrous mat before the curing or heating step.

45. The method of claim 43, wherein said binder and said thermoplastic fibers are heated simultaneously to provide a melt bond during said curing or heating step.

46. The method of claim 43, wherein said binder is a heat curable thermosetting resin, said thermoplastic fibers being melt bonded to said textile glass fibers and said rotary glass fibers and said heat curable thermosetting resin being heat cured to form an adhesive bond with said textile glass fibers and said rotary glass fibers during said curing or heating step (d).

47. The method of claim 44, wherein said curing or heating step (d) comprises a temperature at which said thermoplastic fibers and said binder are at least partially molten at the same time.

48. A thermal and acoustical insulation product comprising:

a blended mixture of rotary and textile glass fibers, thermoplastic fibers and resinous binder, said rotary and textile glass fibers being bonded together by the combined adhesion caused by heating said blended mixture whereby said thermoplastic fibers and said resinous binder are disposed at least partially in molten state and thereafter cooling said heated blended mixture to ambient temperature to form said insulation product.

49. The insulation product of claim 48, wherein said thermoplastic fibers comprise nylon.

50. The insulation product of claim 48, wherein said resinous binder is a powdered or liquid, thermosetting or thermoplastic biner.